

Faculty of Engineering & Technology

Metallic Structures 3

Information :

Course Code : SCM 512 **Level :** Undergraduate **Course Hours :** 3.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Professor	Mohamed Abdel Kader Mohamed Zaky El Aghoury	7
Professor	Mohamed Abdel Kader Mohamed Zaky El Aghoury	7
Associate Professor	Said Yousif Aboul Haggag Abdul Aziz	4
Teaching Assistant	Reham Milad Kamel Samaan	2
Teaching Assistant	Ahmed Amr Kadry Ahmed Shaheen	4
Teaching Assistant	Reham Milad Kamel Samaan	2
Teaching Assistant	Ahmed Amr Kadry Ahmed Shaheen	4
Teaching Assistant	Ahmed Amr Kadry Ahmed Shaheen	4
Teaching Assistant	Reham Milad Kamel Samaan	2
Teaching Assistant	Ahmed Mohamed Abdelnaby Ali Shafay	2

Area Of Study :

Upon successful completion of this course, the student should be able to: - Understand the basic concepts and main principles - Calculate the values of the essential terms - Design and draw neat details - Apply Codes provisions Regarding composite beams composite columns high rise system floor beam systems cold formed section stairs

Description :

High rise steel buildings: structural systems, design loads (dead, live, wind and seismic), Static analysis, Floors, Connections: flexible, rigid, semi-rigid, cold formed steel members.

Course outcomes :

a.Knowledge and Understanding: :

1 -	Define the main terms of composite beams
2 -	Define the main terms of high rise system

b.Intellectual Skills: :

1 -	Design the elements of composite beams
2 -	Design the elements of composite columns
3 -	Analyze the system of high rise system

4 -	Analyze the system of floor beam systems
5 -	Design the elements of cold formed section
6 -	Analyze the system of stairs

c. Professional and Practical Skills: :

1 -	Apply Code provisions regarding composite columns
2 -	Prepare technical reports for high rise system
3 -	Draw neat details of floor beam systems
4 -	Apply Code provisions regarding cold formed section

d. General and Transferable Skills: :

1 -	Work under stress
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Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
composite beams	2	9	3
composite columns	4	9	3
high rise system	2	6	2
floor beam systems	4	6	2
cold formed section	2	9	3
stairs	2	3	1
Revision	2	3	1

Teaching And Learning Methodologies :

Interactive Lec.
Discussion
Problem Solving
Project
Report / Present

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final exam	40.00		
Mid- Exam I, II	30.00		
Project	10.00		
Quizzes / Assig	10.00		
Report / Present	10.00		

Course Notes :

Students Lecture Notes

Recommended books :

Egyptian Code of Practice for steel construction and bridges.